

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003180**Date Inspected:** 28-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Fu Yu Hong**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The QA inspector observed ZPMC performing layout, cutting, beveling, milling, fitting and welding activities in bay # 1 and 2 on Tower Assembly shop.

Ultrasonic testing

The QA inspector performed ultrasonic testing (UT) at the completed joint penetration at the skin plates splices weld joints # ESD1-SA-216-A/K-20B, ESD1-SA-216-A/K-19B, SSD1-SA 179-D/E-26B, SSD1-SA-179-D/E-31B, SSD1-SA179-E/E-2B, SSD1-SA179-E/E-1B and SSD1-SA179-D/E-29B and SSD1-SA-179-E/E-3B. The QA inspector performed 10 % UT at random locations. The QA inspector found that welds areas tested appeared to be in compliance with the contract documents. See UT report TL_6027 generated on this date.

The QA inspector informed Caltrans Lead Inspector Gregory Bertlesman that ZPMC started testing the weld joint # ESD1-SA-216-A/K-20B, ESD1-SA-216-A/K-19B without informing Caltrans representatives about the testing. The QA inspector had a conversation with ZPMC representative Fu Yu Hong. Mr. Fu informed the QA inspectors that ZPMC did not inform Caltrans representatives because ZPMC gave to Caltrans representatives written notification on 06-27-2008 when ZPMC started the testing. Mr. Fu agreed that ZPMC needed to inform Caltrans again when the test was not completed on the same day that the test re-started.

The QA inspector observed ZPMC welding operator Sun Ping # 040741 performing welding operations with the submerged arc welding (SAW) process using the WPS-BT2221-U3 c-S in the flat (1G) position at the junction of

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the weld joint # ESD1-SA227-A/H-34A and ESD1-SA-80 B/E-13A Skin plate and longitudinal plates connections.

The QA inspector performed welding parameters verifications. The QA inspector found that the welding parameters appeared to be in compliance with the contract documents.

Skin C East lift # 1

The QA inspector observed ZPMC welding operator was Xia Yong Zheng (04882) performing welding operations with the submerged arc welding (SAW) process using the WPS-BT2221-U3 c-S in the flat (1G) position at the junction of the weld joint # SSD1-SA-80 B/E-12A skin plate connection. The QA inspector performed welding parameters verifications. The QA inspector found that the welding parameters appeared to be in compliance with the contract documents.

Welding operator Magnetic Particle Testing (MT)

The QA inspector observed QC ZPMC representative Wang Wei performing MT operations at the longitudinal weld connection ESD1-SA-107-21B. Mr. Wang found that welds were in compliance with the contract documents. ZPMC's MT verifications appeared to be in compliance with the contract documents.

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua T. Ishibashi, 086-13764710411., who represents the Office of Structural Materials for your project.

Inspected By:	Acuna, Alfredo	Quality Assurance Inspector
Reviewed By:	Cochran, Jim	QA Reviewer
